#### DOCUMENT RESUME

**3**D ·181 320

CE 023 944

AUTHOR TITLE

Campbell-Thrane, Lugille, Ed.
Let's Work Together: Intervention Strategies for
Learners with Special Needs. "It Isn't Easy Being
Special." Research & Development Series No. 175.
Ohio State Univ., Columbus. National Center for
Research in Vocational Education

INSTITUTION

Research in Vocational Education.
Office of Education (DHEW), Washington, D.C.

SPONS AGENCY PUB DATE NOTE

39p.: For related documents see CE 023 943-947 and CE 0.23 952

AVAILABLE FROM

National Center Publications, National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, 7H, 43210 (\$3.20: six-piece set, \$25.00)

EDRS PRICE DESCRIPTORS Academically Gifted: Administrator Responsibility:
Administrator Role: American Indians: Bilingual
Students: Change Strategies: Counselor Role:
\*Disadvantaged Groups: \*Educational Needs:
\*Educational Responsibility: \*Educational Strategies:
Guidelines: Handicapped Students: Migrants: Minority
Groups: Needs Assessment: Prisoners: \*Special
Education: Talented Students: Teacher Responsibility:
Teacher Role: \*Vocational Education

#### ABSTRACT

Divided into four chapters, this monograph focuses on strategies that meet equally the common needs of all students and the unique needs of special studen+s. Chapter 1, Preparing to Meet the Needs of Special Students: Let's Look at Our Responsibilities, identifies special needs populations and presents a list of responsibilities for teachers, counselors, and administrators in helping the special needs learner to succeed in a vocational program. The second chapter explores ten educational needs common to all learners and discusses basic strategies that may help teachers, counselors, administrators, and others to perform effectively with the special student. Chapter 3 provides lists of unique needs of seven special groups and presents strategies for meeting them. Special groups included are (1) American Indians, (2) individuals with limited English proficiency, (3) inmates of correctional .institutions, (4) minority groups, (5) gifted/talented students, (6) handicappeo students, and (7) migrants. The concluding chapter gives steps to improve access to vocational programs and to improve student performance. (LRA)

"It Isn't Easy Being Special"

### LET'S WORK TOGETHER:

Intervention Strategies for Learners with Special Needs

The National Center for Research in Vocational Education

The Ohio State University 1960 Kenny Road Columbus, Ohio 43210

1979

U.S. DEPARTMENT OF HEALTH, EQUICATION & WELFARE NATIONAL INSTITUTE OF EDUICATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENCY OF FICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY



#### O

#### THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research is: Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs



The project presented or reported herein was performed pursuant to a Contract with the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.



### TABLE OF CONTENTS

| Foreword v  |
|---|
| Chapter 1 .   |
| Preparing to Meet the Needs of Special Students:  Let's Look at our Responsibilities  |
| Chapter 2   |
| Educational Needs that are Common to All Learners: What They Are and How to Meet Them |
| Chapter 3   |
| Unique Educational Needs of Special Groups: Ways to Meet Them                         |
| Chapter 4   |
| Conclusion  |
| ibliography 35  |

#### **FOREWORD**

Educators have consistently disagreed about the most effective way to accommodate the needs of exceptional students. Various concepts such as "mainstreaming", "least restrictive environment", or even classroom segregation have been applied to the special needs learner.

Teachers, counselors, and administrators are looking for solutions to the problem of meeting special needs by assessing both the common and unique educational needs of "special" people. Parents too must be aware of educational alternatives and opportunities which provide the best educational experience for the child. Once those needs are identified, strategies must be developed to meet equally the common needs of all students, and the unique needs of "special" students.

This booklet may provide direction for anyone who works with mainstreamed or special classroom students to meet both shared and individual requirements.

Let's Work Together: Intervention Strategies for Learners with Special Needs is one of a series of National Center publications devoted to issues, problems, and answers in serving special needs learners. This ongoing series, "IT ISN'T EASY BEING SPECIAL," reflects the National Center's commitment to improving vocational education programs and services for special needs populations.

Let's Work Together: Intervention Strategies for Learners with Special Needs is one of a series of National Center publications devoted to issues, problems, and answers in serving special needs learners. This ongoing series, "IT ISN'T EASY BEING SPECIAL", reflects the National Center's commitment to improving vocational education programs and services for special needs populations.

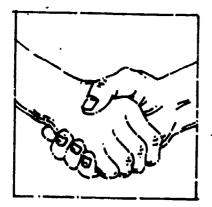
The National Center is indebted to Luciile Campbell Thrane, Associate Director, Development Division, for editing; to Sharon Malak, Program Director; to Patricia Worthy Winkfield, Project Director; to Fred Williams, Marion Johnson, Nancy Lust, Lorraine Cordova, Leila Hutchison, Lynn Brant, Betty Ann Denniston, and Gonzalo Garcia for carrying out the work of the project. Credit is also due to the many technical panel members and consultants who made significant contributions to the project. A special note of appreciation is extended to Frances Louthen, Janice Miller, and Brenda Downey for their secretarial assistance.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

ERIC

V

#### **CHAPTER 1**



PREPARING TO MEET THE NEEDS OF SPECIAL STUDENTS:

LET'S LOOK AT OUR RESPONSIBILITIES

A major priority in education today, and certainly in vocational education, is to develop ways to respond more effectively to the educational needs of special populations. These special people include the handicapped, economically and educationally disadvantaged persons, those in correctional institutions, migrants, bilinguals, those with limited English proficiency, the gifted and talented, and minority groups such as Blacks, Hispanics, Asians, American Indians, and Appalachians. Children and adults, males and females, who are educationally or economically disadvantaged or handicapped may not be deriving full benefit from the formal educational process either in academic or vocational programs. Many students with special needs leave school each year without the necessary skills to be productive members of our society. Of the special needs groups in school, relatively few receive adequate training for employment.

Teachers, counselors, parents, volunteers, paraprofessionals, and administrators could better prepare students through strategies which encourage access to a wider number and variety of vocational programs. Additional assistance and services should be extended to vocational programs and to the job. Performance levels would increase, and special people could compete more effectively on the job market.

All educators must be aware of five essential components of every student's growing and learning process. Anyone who works directly with or influences a student in any way must be prepared to respond to the student's

- basic physical needs
- psychological needs
- requirements for basic educational skills
- basic survival skills
- career development needs

For special students, these five universal needs are often difficult to meet because of physical, psychological, educational, and economic barriers. There are effective strategies for meeting those



needs; in some cases, creative strategies or new approaches to existing strategies may need to be devised. In vocational programs, the success of any strategy depends upon the characteristics of the special group to which it is applied. Special people require special help or services in order to enter, perform acceptably in, and complete a regular vocational program. Special needs populations include migrants, those of limited English proficiency, the handicapped, the disadvantaged, the gifted and talented, minority groups, and inmates of correctional institutions. Legislative and federal sources as well as non-governmental research groups categorize special populations as follows:

#### **Minorities**

- Black-Americans
- Hispanics

Mexican Americans

Puerto Ricans

Cubans

Latin Americans

American Indians

Including Alaskan Natives or Aleuts Hawaiians

- Appalachian Whites
- Asian Americans

#### Disadvantaged

Persons who have academic or economic handicaps, and who require special services and assistance in order to complete vocational education programs.

#### Handicapped

Persons who are

- mentally retarded
- hard of.hearing .
- deaf
- speech impaired
- visually handicapped
- emotionally disturbed
- orthopedically impaired
- otherwise health impaired who have specific learning disabilities, and who, by reason of the above,
  - 1. require special educational and related services
  - 2. cannot succeed in a regular vocational education program without special educational assistance; or
  - 3. require a modified vocational education program.

#### Gifted and Talented

Those persons of great intellectual ability who demonstrate a high level of creative thinking, psychomotor ability, and special aptitude.

#### **Limited English Proficiency**

Those individuals who are linguistically different, or whose English-speaking ability is restricted by their environment.

#### Migrants

Students who have moved from one school district to another during any given year and whose parents or relatives work in seasonal agricultural or related food processing industries.

#### Inmates of Correctional Institutions

Persons who are under the jurisdiction of any correctional system.

These definitions should clarify the unique characteristics of each special group.



Success also depends on how well teachers, counselors, and administrators relate and respond to the needs of special students. Each of these people plays a special role and has certain responsibilities in helping the special needs learner to succeed in the vocational program.

**TEACHERS** 

Vocational teachers play a major role in the social/educational process as providers of services to assist students to fully develop their personal and vocational potential. This can be accomplished through

- assessing the student's needs
  - to determine appropriate classroom placement
  - to develop a viable instructional program
  - to identify opportunities and barriers to the student's success
- providing information to students concerning
  - qualifications, educational requirements, salary, expectations, and projected job openings in various occupations
  - assessment of personal interests and aptitudes
  - work experience opportunities
  - opportunities for selecting non-traditional occupations
- support services
- survival skills that improve
  - work attitudes
  - social and personal behavior
  - employability
  - ability to interact with peers, employers, teachers, and parents
- continuous evaluation of and feedback to students on their talents and abilities

Teachers work with students on a continuing basis. They are the one constant link in the educational chain. The positive or negative attitude the student assumes can be attributed to the attitude of and classroom elimate set by the teacher.

#### COUNSELORS

The counselor must be responsive to special needs students. The counselor functions as collaborator, interviewer, coordinator, and "all-around friend" to the special student. Counselors

- relate career information
- ensure valid and continuous assessment
- recruit into non-traditional classes
- maintain linkages with community organizations that work with special students
- arrange for resource speakers and workshops
- provide supportive counseling at critical times
- assist with job development and job placement

Counselors working with special students should develop and maintain good personal relationships. Devotion and caring are two characteristics that are most beneficial. The counselor must work with parents as well as school staff to make them aware of their feelings toward the person with special needs. The counselor must show how negative feelings may unintentionally reinforce a student's negative self-concept and how positive attitudes reinforce positive self-concepts.

Counselors' functions are many and varied, but the role they play is crucial to the development and happiness of special needs students.



3

#### **ADMINISTRATORS**

The administrator provides necessary leadership in organizing and implementing the school program. The critical services the administrator offers to the staff include:

- organized planning and promotion of and participation in preservice and inservice activities designed to improve competencies of special needs instructional and support staff
- analyzing curriculum content, technical information, and other related subject matter
- assisting special instructional staff and support service staff in the selection of facilities, equipment, and instructional materials
- evaluating program and instructional materials; identifying strengths and weaknesses within the operating system
- advocating the role and importance of vocational education for special needs subpopulations in economic development and community growth
- establishing linkages with business, industry, labor, and the community defined broadly to include employers and the agriculture, health and service industries, both public and private, as well as advisory groups representative of those organizations which promote the concerns of special needs subpopulations

Advisory committees should be called upon to assist the administrator. They can participate in

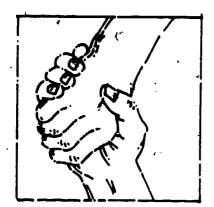
- planning development activities
- providing advice on administrative functions such as
  - budgeting
  - accounting
  - financing
- supporting special bond issues or tax levies to provide equipment and supplies to improve programs

The local administrator must have the support of the community, business, labor, industry, parents, and staff to discharge effectively the responsibilities of managing the vocational education system. The administrator as advocate and implementor can strengthen the responsiveness of the educational system to the special needs learner.

In the next chapter, we will explore ten educational needs common to all students but especially important to "special" students, and suggest ways for the teacher, counselor, administrator, and parents/volunteers/paraprofessionals to respond effectively to those needs.



#### **CHAPTER 2**



# THAT ARE COMMON TO ALL LEARNERS:

WHAT THEY ARE AND HOW TO MEET THEM

In Chapter 1, we identified five essential components in the student's growing and learning process. Each of the components includes specific educational needs. The ten needs listed below are shared not only by all special needs groups, but also by all learners. Our success in meeting these needs will affect the progress of the student through this vital growing and learning process.

#### **Shared Educational Needs**

- 1. To increase options in a variety of occupational roles through career awareness, orientation, exploration, planning, and decision-making activities.
- 2. To determine educational and vocational requirements, interests, and to improve instructional and support services.
- 3. To develop a positive self-concept.
- 4. To provide meaningful hands-on experiences to enhance occupational skills and employability.
- 5. To improve educational and communications skills within school and work settings.
- 6. To provide actual work experience to develop positive attitudes to employment opportunities.
- 7. To develop coping and survival skills for problem-solving.
- 8. To increase access to support services.
- 9. To encourage special needs learners to consider non-traditional educational programs.
- 10. To acquire the skills for seeking, obtaining, and maintaining employment.

Let's explore each of these needs and look at some basic strategies that may help teachers, counselors, administrators, and others who work with students to perform effectively with the special student.



To increase options in a variety of occupational roles through career awareness, orientation, exploration, and decision-making activities.



Special students are often underrepresented in vocational education classes and have limited alternatives in selecting a vocational program. Special students often lack role models, community representatives, and resource persons who could provide information for broader-based decision-making. Other barriers may arise from physical, geographical or social isolation.

Educators, parents, paraprofessionals, and volunteers who work with special students should provide career information that will permit individuals to make realistic decisions about their own destinies. Each of these groups can increase the career options of people with special needs.

#### **TEACHERS**

Teachers need to expand the walls of the classroom to include the community. Alternative classroom experiences should include

- role models as resource speakers
- instructional materials on cáreers written to fit specific needs of individuals
- work experiences at actual sites or simulations in the classroom
- plans for students to participate in and visit vocational and career fairs
- field trips and excursions

Teachers should make every effort to relate the special student's instructional program to the work world.



#### COUNSELORS

One of the major responsibilities of a counselor is to help the student to learn about himself/herself. The total person must be viewed in order to identify strengths and weaknesses that affect the decision-making process in selecting a lifetime career.

The counselor cannot work alone. Parents, teachers, and administrators must provide positive career planning assistance. Students must explore

- career aspirations and decision-making
- career choices and selections
- career planning as it relates to selfconcepts and life styles

The counselor is the liaison who coordinates interaction among the community, the school, and business, industry, and labor. Counselors carr modify negative attitudes toward and misconceptions about the "special" learner on the part of employers. When interacting with potential employers, counselors should focus on

- benefits of hiring "special" people
- encouraging equal access to jobs for special groups
- techniques that will aid in maximum utilization of the human resources of special students

#### **ADMINISTRATORS**

An important responsibility of administrators is to provide staff development time and resources to permit staff to work more effectively with special students.

The administrator should encourage staff to visit and observe actual work situations in industry. These jobs may relate to the kinds of opportunities that would be available to special students as work experience, work study, or full-time employment. If funds are necessary to provide teachers with this opportunity, then it is the responsibility of the administrator to seek those funds.

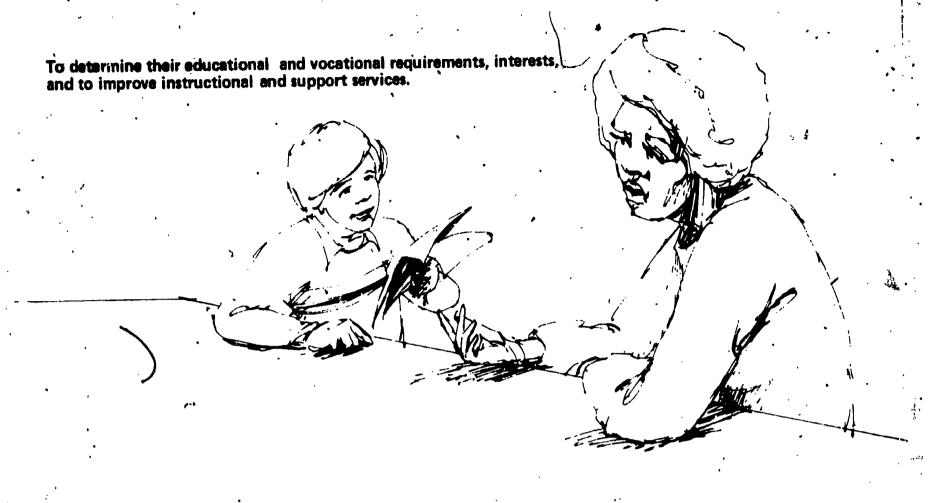
The administrator should continually assess the effectiveness of various classroom techniques. Administrative avenues for communicating and sharing information with staff must be open at all times.

# PARENTS/VOLUNTEERS/PARAPROFESSIONALS

These helpers should become as knowledgeable as possible about the job market and employment opportunities in the community. They can contact or participate in service groups in the community to make people aware of the capability and availability of special students. Their interest in what happens in the classroom and their willingness to comply with requests of school personnel for assistance make them a very valuable resource. Most importantly, they offer love, understanding, and empathy to the special student as he or she searches for a meaningful, rewarding place in the world of work.



7



utilize vocational materials, learning techniques, and vocational subject matter if the teacher does not have a total and realistic perception of the student's cognitive style, educational limitations, abilities, or disabilities. Some problems that result from a lack of appropriate assessment are

- poor performance by students in the program due to instruction which is inappropriate to student achievement level
- low expectancy levels on the part of teachers
- denial of entry to vocational programs based on standardized tests which are often not true indicators of special students' potential for success.

Assessment should be continuous, not only to measure the rate of and increase in skill development, but also to measure both changes in interest and the potential value of support services provided by the community. Such extensive assessment requires the assistance of parents, volunteers, and paraprofessionals in providing the necessary contacts, time, and personal support to assist learners with special needs to perform to their maximum capabilities.

Educators who have had limited experience and opportunity to work with special learners should become familiar with the proper instruments, devices, and techniques to assess accurately the needs, interests, and abilities of these students. Teachers, counselors, and administrators should work cooperatively to provide a comprehensive assessment and evaluation program.

#### TEACHERS

In the classroom setting, teachers can use a number of strategies to develop more accurate perceptions of special learners' needs, interests, and abilities. These include group discussions, practical examinations, and interest checklists. Since many learners with special needs experience anxiety about taking tests, it is important that educators attempt to alleviate these feelings of anxiety by providing simulated tests to familiarize them with test- .# ing procedures. During these simulation experiences, teachers should emphasize that testing procedures are not employed to exclude students from programs, but are used to provide some indication of student needs. Teachers should be aware of and provide for the fact that some learners with special needs may require some support or adaptations to function effectively within the testing situation. Teachers should closely monitor students' behavior and performance during these simulation experiences and make appropriate adjustments or referrals if significant problems are revéaled.

#### **COUNSELORS**

In order to provide valid and continuous assessment for improving instruction for learners with special needs, counselors need to use multiple and unbiased assessment instruments. Initially, an inventory of available tests should be developed by counselors and teachers with the assistance of an expert in the area of testing and measurement. This inventory should be expanded to include an annotated listing of assessment instruments which identify the strengths and limitations of each test and the biases reflected for learners with special needs. This approach provides an available resource for weighing the advantages and disadvantages of any instrument.

#### **ADMINISTRATORS**

Administrators should promote and support policies that encourage the development of a comprehensive assessment program designed to aid all students in securing maximum benefit from courses and testing procedures. Through valid and continuous assessment. educators will have more reliable and accurate data with which to plan student programs and to identify specific problem areas that may require professional or special attention outside the school. The administrator should create an environment where information concerning student performance is shared openly with both parents and students. This approach may discourage early school leavers and student dissatisfaction with programs they have selected.

# PARENTS/VOLUNTEERS/PARAPROFESSIONALS

This group can be a valuable resource in improving instructional and support services which often require one-to-one interaction and assistance on a long-term basis. Their contributions include

- donating time and showing interest
- listening and providing encouragement
- introducing students to agencies and organizations that provide services to specific special needs groups
- helping to find and administer appropriate testing instruments
- tutoring
- providing support in the student's self-evaluation and decision-making processes
- providing transportation





The development of a positive self-concept for learners with special needs is paramount in order for these students to realize their fullest potential. Poor self-concept among these students often contributes to

- aggressive or violent behavior toward others
- withdrawal from individuals who are trying to help them with their problems
- behavior that is counterproductive to overall self-esteem

A feeling of security is needed before learning can really begin. Important to the development of a positive self-concept is the cultivation of a positive attitude. A positive attitude must be nurtured within a supportive environment. Not only do positive attitudes of educators, family, and peers contribute to positive self-concepts of special needs learners, but also those positive attitudes relate directly to expectancy levels. There is a strong correlation between expectancy levels and actual performance levels.



#### **TEACHERS**

Teachers of special needs learners should provide and encourage

- individualized learning programs
- meaningful classroom experiences 🐔
- positive reinforcement
- peer support.
- realistic expectations

In order to provide individualized educational experiences and to maintain a climate of warm acceptance, teachers need adequate preservice and inservice training. They must first be able to accept themselves before they can cultivate a positive accepting attitude toward the special needs population they are serving. Teacher attitude change is a long-term process and involves staff development training, positive working relationships with members of special needs populations, and information about their special concerns and problems. In order to provide positive learning experiences for special needs students, the teacher must also know how to plan, instruct, and pace the students in individualized educational programs. 'System-wide in-service training and assistance will provide teachers with the necessary skills for individualized instruction.

#### **COUNSELORS**

The role of the counselor in helping special needs learners to develop positive self-concepts demands that he or she provide

- small group and individual counseling sessions that increase positive interactions with others
- positive role models
- assistance to parents in developing or / maintaining positive attitudes and realistic expectations
- an educational climate in which both teachers and peers will be more accepting and responsive in their relationships with special learners

#### **ADMINISTRATORS**

The local administrator should work with special learners and their families in the school system and the community to foster acceptance. Interaction with parents and employers, community linkages, inservice training sessions for all staff, sponsorship or youth groups. and the individualization of student educational programs may enhance acceptance. The administrator must be aware of and sensitive to the needs and concerns of special learners and their families in order to make programmatic changes that will assist the student to develop a more realistic and positive selfimage. To develop this attitude of sensitivity and acceptance, the administrator should participate in inservice or preservice training to become familiar with the needs of special populations. In turn, he or she will need to make this training available to staff by providing inservice training sessions or release time for them to improve their personal development in a variety of settings.

# PARENTS/VOLUNTEERS/PARAPROFESSIONALS

These individuals can provide situations in which students can achieve and experience success. Attitudes and expectations should be both positive and realistic in order to provide this kind of help. Repeated successes over a long period of time in all areas of living and learning foster a positive self-image, so it is important to provide opportunities for success at an early age, especially in the home, and to provide a climate in which the student feels accepted as a valuable member of a group—the family, the class, the community.





Hands-on experience may increase the capacity of special needs learners to function within vocational education programs and to adjust to the work setting.

Students with no hands-on experience may encounter

- longer training periods once actual em ployment begins
- limited success in vocational training programs
- difficult transitions from school to the world of work
- employer dissatisfaction with performance levels once vocational education training is completed

Many students with special needs become disenchanted with vocational programs because of the necessary academic requirements for entering those programs. Even students who have an aptitude for the skill to be learned may lose interest because of a lack of related hands-on experiences.

In order to increase student opportunities for meaningful hands-on experiences, instructional materials must include tangible and experiential learning tools. Modified materials and up-to-date equipment should be available. Hands-on experiences should be appropriate to the learner's skill level, interest, and past experiences.

#### **TEACHERS**

In order to develop and implement learning activities for the special needs student, teachers should be creative in developing and utilizing traditional as well as alternative work settings.

Any activity which allows the student to participate actively and to develop job-related skills should be encouraged. Many hands-on activities require little time to implement. These activities could include:

- demonstration of hand tools use
- manipulation of small parts assembly
- identification and proper use of equipment

#### **COUNSELORS**

Counselors can expand opportunities for learners with special needs by

- coordinating work experience activities in and out of the school setting
- ensuring appropriate placement in cooperative programs
- providing referral services to cooperating work experience programs within the community to allow learners to gain skill in potential work settings

#### **ADMINISTRATORS**

In order to increase meaningful hands-on experiences for learners with special needs, administrators should

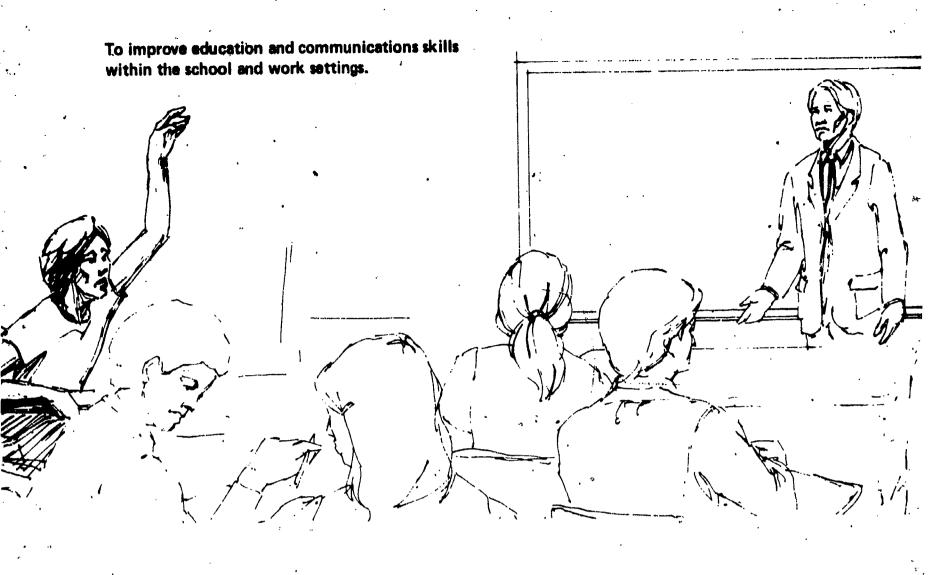
- provide necessary program supplies and equipment
- allocate appropriate space for these activities within the building
- provide flexible schedules to accommodate hands-on activities
- seek additional funding if needed
- initiate and develop contacts with employers and community agencies, to provide training opportunities
- act as liaison to promote the program's purpose, goals, and objectives.

### PARENTS/VOLUNTEERS/PARAPROFESSIONALS

Persons assisting special needs learners can provide them with direct help in gaining manipulative skills. They can also seek cooperation in the community to make industrial equipment available for teaching purposes. They should guard against a possible inclination to restrict the learner out of fear for his or her safety.



13



A significant problem confronting learners with special needs is the lack of adequate basic education and communications skills. They are often unable to perform adequately in vocational education programs because of reading disabilities, poor language development, and poor communications skills. These deficiencies make many students unable to obtain, maintain, and progress in suitable occupational roles and positions.

For the most part, these problems are caused by social, cultural, and academic deprivations. The lack of adequate basic education and communications skills frequently results in

- identification as a slow learner, with subsequent placement in special education programs and classes for the mentally retarded
- exclusion from specific vocational education programs that require a high level of proficiency in basic education and communications skills
- restricted development of social and employability skills
- limited occupational mobility and potential.

Special needs learners may require supplemental education or remedial instruction designed to

- improve reading, writing, speaking, and basic arithmetic skills
- encourage social interaction



#### **TEACHERS**

To improve the basic aducation and communications skills of special needs learners, teachers must

- become proficient in identifying and diagnosing the basic academic and communications skill deficiencies
- develop simple written and oral evaluation instruments for use in assessing progress
- use prescriptive and individualized remedial education plans
- develop innovative methods and techniques for presenting materials to limited-English speaking students
- make modifications to existing curriculum materials to increase the learning potential of students with reading disabilities.

#### **COUNSELORS**

Counselors can assist learners by

- identifying specific language, communications, and reading disabilities
- designing and developing appropriate diagnostic and assessment tools and techniques
- providing information for increasing access of special needs learners to specific academic and remedial instructional programs, including English As A Second Language (ESL), General Education Development (GED), bilingual programs, and other high school equivalency programs.

#### **ADMINISTRATORS**

Vocational administrators concerned with improving the basic education and communications skills of special needs learners must assume increased responsibility for

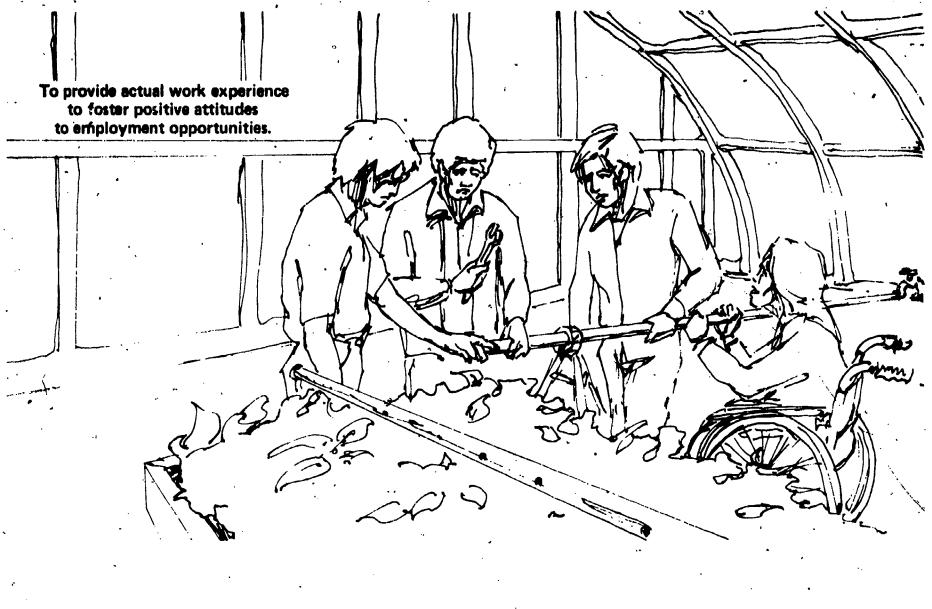
- developing comprehensive remedial education programs within vocational education curricula
- providing adequate facilities and resources to assist teachers and counselors
- promoting the development of individualized remedial education and employability training programs.

# PARENTS/VOLUNTEERS/PARAPROFESSIONALS

Students with deficiencies in reading, writing, speaking, and arithmetic skills need one-to-one assistance. Parents, volunteers, and paraprofessionals can bring the learner to a level at which he or she can successfully participate in school programs and the work world by

- providing the learner with practice in speaking and listening
- directing student learning according to the teacher's individualized instruction plan
- assisting in remedial activities





It is important that special needs subpopulations obtain a wider range of work experience opportunities. Because they lack these opportunities, they are often unable to obtain parttime or fulltime employment during and after high school. Cooperative work experiences, apprenticeships, and other on-site work experiences should be made available to special needs learners. Some obstacles to be overcome in achieving this goal are

- negative attitudes of employers
  - lack of social skills and positive attitudes
  - limited vocational opportunities
  - lack of modified equipment and materials
  - excessive concern for the safety of the student
  - rigid scheduling of the school day

Vocational educators should provide special needs students with work experiences, both paid and-unpaid, to develop appropriate work skills, habits, and attitudes.

#### **TEACHERS**

Vocational teachers should provide special students with job-related responsibilities and opportunities for

- learning to be punctual
- decision-making
- appropriate social behavior

They should be familiar with

- needs and opportunities for employment in business and industry
- aptitudes and limitations of special needs students
- motivating students to try new types of work.



#### COUNSELORS

Counselors should act as student advocates both within the school and the community. They should take an active role in presenting the advantages of hiring special needs students to employers. Counselors should provide

- information to enable employers and educators to help special students to succeed in work experience programs and actual job situations
- assistance to special needs learners in understanding employers' expectations
- a chance to explore work opportunities that increase self-esteem

#### **ADMINISTRATORS**

The local administrator should play a key role in

- developing work experience opportunities for special needs students
- fostering acceptance of special people by local employers and the community by showing positively what can be gained by hiring these people when appropriate support services are available

 contacting community organizations affiliated with business and industry such as the chamber of commerce or special interest groups to increase awareness of the value of the special needs learner as a potential employee.

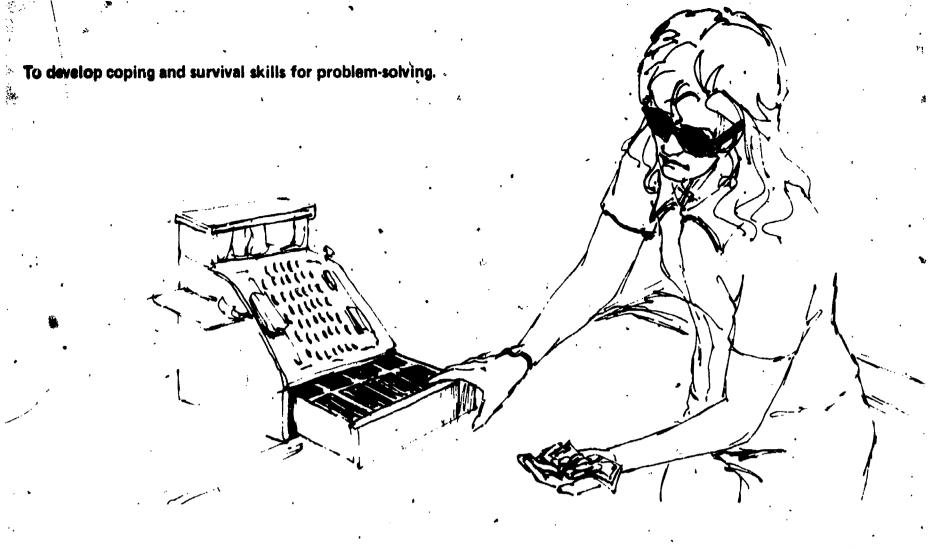
The administrator should be knowledgeable about current skills and qualifications requirements for special needs students to obtain employment in the local labor market.

# PARENTS/VOLUNTEERS/PARAPROFESSIONALS

By increasing work experience opportunities for special needs students, this group can contribute by

- being knowledgeable and vocal in the community about the need for modified equipment and the need to remove architectural barriers
- refining social and communications skills
- providing moral support
- providing transportation
- working to eliminate attitudinal barriers in the home, school, and community.





Learners with special needs often lack coping and survival skills needed to exist in a competitive culture. The academic, economic, and social sectors of our society all require these skills as well as the ability to solve problems. The special learner's deficiency in this area is frequently the result of several of the following factors

- educational deprivation
- naiveté
- inappropriate behavior
- isolation from the mainstream
- geographic, physical, or cultural isolation
- excessive concern for safety and well-being

To overcome these limiting factors, special learners need special educational programs, individualized guidance and counseling, and experience in a variety of situations in which they have a non-threatening opportunity to deal with success and failure. Broblem-solving requires development of their ability to

- identify problems
- generate solutions
- evaluate solutions
- choose and implement solutions
- test solutions



#### **TEACHERS**

The teacher's major role is to prepare students to become mature and responsible individuals with adequate social and personal skills. Instruction may be necessary in such diverse areas as grooming, dress, personal hygiene, or consumer skills. After assessing the individual needs of the student, teachers should implement activities which provide maximum exposure to appropriate social and personal behavior. These activities should include

- sensitivity/awareness sessions to examine values and attitudes
- peer approval to validate appropriate behavioral change
- establishment of trust-centered relationships within a group
- communications skill development to analyze verbal and non-verbal cues

To facilitate these activities, teachers may use audio-visual equipment such as lecture-tape series, video-cassettes, and tape recorders to provide immediate feedback for students in simulations and game scenarios. Teachers may need additional support staff for individualized instruction and small group discussion. Teachers should be aware of all support services available and inform students about methods of access to them. In this way, teachers can help students to experience satisfying social interactions with teachers and peers and to develop better coping and survival skills.

#### COUNSELORS .

Counselors should work with parents, teachers, and administrators by leading workshops and discussion groups on values clarification, stress and behavioral management, and setting priorities. Counselors can clarify the role of parents, teachers, and administrators in helping students to develop coping and survival skills, and make appropriate referrals to external agencies such as crisis intervention and family and group counseling centers, Bureau of Employment Services,

vocational rehabilitation, and mental health programs. Counselors need flexible schedules in order to

- meet with teachers
- make appropriate referrals (arrange for transportation as necessary)
- interact on a continual basis with students, parents, and community service agencies.

The interactions coordinated by counselors will reinforce positive behavioral patterns and will foster improved social and coping skills.

#### **ADMINISTRATORS**

Administrators should provide necessary leadership to teachers, counselors, and support service staff assigned to work with learners with special needs, to enable them to implement successfully programs designed to increase survival and coping skills. Administrators should play a key role\*in

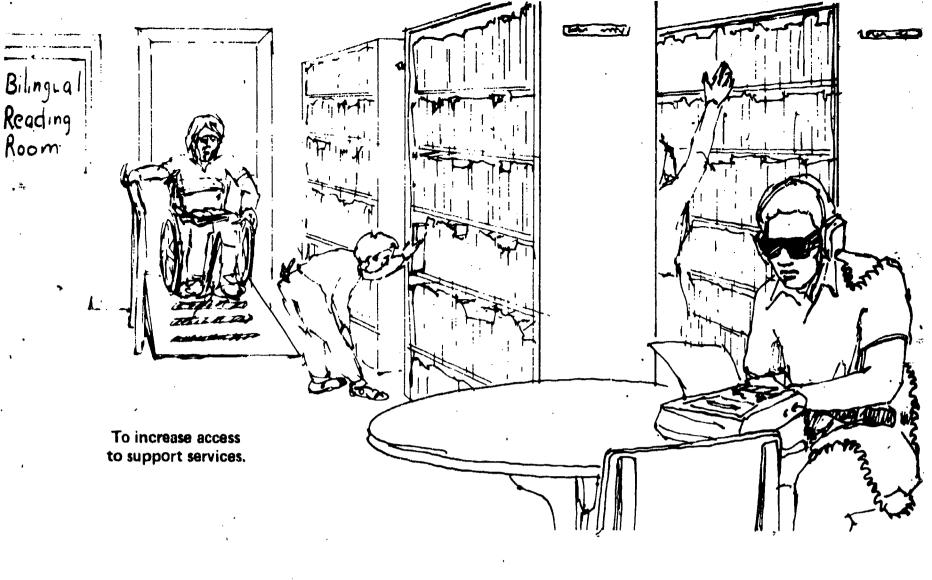
- implementing program goals
- providing support services
- evaluating program performance objectives
- redefining program outcomes

Administrators should view efforts to provide special help and to reduce student anxiety and stress as an integral part of program services for these learners.

#### PARENTS/VOLUNTEERS/ PARAPROFESSIONALS

These persons guide special learners as they "try their wings" at such things as modifying behavior patterns, using public transportation, and coping with frustrations. They can provide supportive, on-going guidance as special learners weigh alternatives and make tentative decisions.





The performance of all special groups is affected when support services are not available or are inadequate to meet student needs. Lack of these services may even result in the exclusion of students from programs or courses which would otherwise be beneficial to them.

Educators must be familiar with the many private and governmental agencies and organizations that provide services in these areas of concern: poverty, health, ethnic minorities, specific physical handicaps, rehabilitation, and

mental health. The services of all such agencies should be coordinated through the school (usually by guidance and counseling personnel), and special needs learners should be put in contact with appropriate agencies. Vocational educators should function as a team in assessing the students' needs for support services, informing students and parents of services available to them, and making referrals to service providers.



#### **TEACHERS**

Teachers should be responsive to the students' personal needs for assistance and aware of the potential resources available to assist students. Teachers are usually most knowledgeable about student performance and can ascertain through observation and daily contact whether there is a need for additional assistance. Teachers, working with counselors, can provide information to students and parents on internal and external resource providers. It is important for the teacher to build rapport with the students in order to assess their needs. Also, some training in crisis intervention and conflict management may be necessary in order for the teacher to cope with special problems that may arise.

#### **COUNSELURS**

The counselors act as service providers themselves. They are in a position to

- assess student needs
- serve as an information resource to students, their families, and teachers
- make referrals to service agencies
- coordinate support services
- maintain contact with service agencies

#### **ADMINISTRATORS**

Administrators can facilitate the establishment of an interagency network by linkages with external service providers. The administrator can coordinate the utilization of all resources (both external and in-school) by

- building a well-trained staff
- making appropriate changes in organizational structure
- securing appropriate facilities, materials, and equipment
- developing adequate transportation and communications systems for responsive programming.

It is the administrator's responsibility to demonstrate the need for additional services to appropriate funding sources.

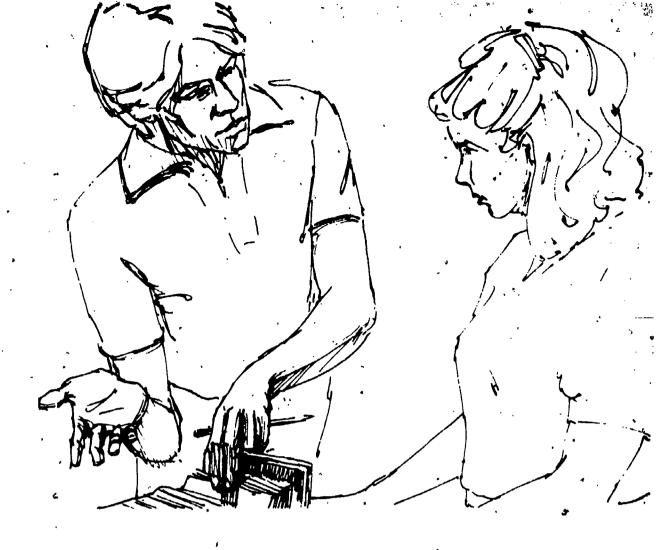
# PARENTS/VOLUNTEERS/PARAPROFESSIONALS

This group is vitally important to ensuring accessibility of support services for special needs learners. Even if the school assumes responsibility for contacting the appropriate service agency or agencies and arranges an initial interview, the student will usually need the added assistance of parents, volunteers, and paraprofessionals in order to derive full benefit from the services. Parents, volunteers, and paraprofessionals can help with

- transportation to health clinics and treatment centers
- guidance in managing money
- assistance in overcoming cultural, racial, or language barriers



To encourage "special" learners to consider non-traditional educational programs.



Special subpopulations are often disproportionately represented in certain skill areas of vocational education such as home economics, business and office education and some trade areas, many of which are becoming obsolete. An examination of enrollment patterns in the highly skilled, technical training areas reveals a scarcity of special needs subpopulations. Attitudes are the principal barriers to the aspirations of the learner with special needs. This inequity can be overcome athrough conscious effort, more appropriate and bias-free counseling, and alternative instructional techniques.

Definite steps can be taken to alleviate the perpetual cycle of underemployment and unemployment of special needs groups. Special needs learners are a valuable source of creative ability and leadership in a variety of occupa-

tions. Negative perceptions toward vocational education in certain communities, especially those which have a concentration of special needs subpopulations can be mitigated. Finally, from a practical standpoint, because labor market projections indicate a marked increase in highly skilled occupations, less emphasis should be placed on entry level skill building for special needs populations and greater emphasis placed on more technical programs.

#### RELATED PROBLEMS

A number of related issues have been cited as contributing to discrepancies in enrollment of the special needs learner. To open all areas



of vocational education to the special needs learner, the following requirements must be met

- increased interest on the part of the student in technical skill areas
- ability to meet entrance requirements for highly skilled programs (some requirements may need modification)
- increased accessibility of program offerings
- increased awareness of career options by the student and by those individuals who influence course selection such as parents, teachers, counselors, and administrators.

#### **TEACHERS**

Teachers can greatly influence the student's decision to pursue a nontraditional program. Teachers should

- invite role models to share their experiences with students
- actively recruit and encourage the special needs student in nontraditional programs
- devise special techniques or make adjustments that may differ from those traditionally used
- select appropriate testing methods
- individualize the student's instructional program

#### **COUNSELORS**

Counselors should provide the fink between home and school by coordinating in-school activities that reinforce the advantages of selecting a nontraditional program. Counselors

#### should

- plan and participate in awareness and parent-effectiveness training
- develop a recruitment program for special needs students
- creatively assess competencies or aptitudes needed for a particular skill area
- assess test results with an open mind
- encourage communication between home and school
- allow for flex ble scheduling

#### **ADMINISTRATORS**

Administrators should support nontraditional program options by

- developing community linkages with business, industry, and labor
- providing opportunities for students to explore all occupational choices
- providing meaningful staff development activities
- seeking support services
- soliciting funding for programs that better meet the needs of special groups

#### PARENTS/VOLUNTEERS/ PARAPROFESSIONALS

These individuals are often role models for the "special" student. Parents/volunteers/paraprofessionals should

- encourage "special" learners to pursue their own interests
- encourage the student to overcome the obstacles of a particular disability
- have a positive attitude
- provide personal assistance with transportation, tutoring, and other activities.



#### The Ohio State University

#### TYPISTS

Select the position tailor-made for you from our numerous openings! Duties range from typing correspondence, manuscripts, exams and reports to receptionist duties and record-keeping. Never dul! Must type 45 w.p.m. minimum: Starting salary \$9,464 annually, increasing to \$9,900.80 after 120 days.

Outstanding employee benefits include assured raises, fully paid medical, vision and life insurance. Paid vacation and sick leave, 10 paid holidays, fultion reimoursement and an excel-tent retirement program. Apply Monday-Friday 8:00-4:00.

CAU



The Ohio State University Staff Employment Services 53 West 11th Avenue Columbus, Ohio 43201

in Equal Opportunity Affirmative Action Employer M 🖹 H

# **SALES POSITION**

#### OCAL INTERVIEWS IN THE NEAR FUTURE

Established, prestigious line of professional auto repair and estimating manuals has choice territory opening in the Ohio area for a full time independent Sales Repre-

Position involves contacting schools, body shops, ilbraries, garages, service stations, as well as existing auto service center customers. Present renewal base plus high commission offers unusual opportunity for amplitious hardworking person. Earning potential in ex cass of 25K. Ability to work on your own and generate w business a must

#### PLEASE SUBMIT RESUMES TO:

An EEO Employer M F



To acquire the skills for seeking, obtaining, and maintaining employment.

One of the most crucial problems faced by special subpopulations is acquiring the necessary skills for seeking and obtaining meaningful and suitable employment. They are disproportionately unemployed, underemployed, and generally underrepresented in the labor force. Many are ill-equipped to demonstrate appropriate and desirable work skills, even though they may demonstrate potential for long-term upward mobility. Usually they acquire entry level jobs with little or no opportunity to transfer or to refine skills. When individuals with special needs can attain only an entry level position, they may become discouraged, demonstrate signs of being unmotivated, develop a poor work

history, experience repeated job performance failure, or be terminated.

Special subpopulations require resources and support service systems which provide

- counseling and guidance
- basic education and survival skills instruction
- financial aid
- health assistance
- legal services
- job placement and follow-through services:

A placement and follow-through program with emphasis on instruction, counseling, employer awareness and orientation, and use of support services can provide meaningful and satisfying employment for special needs subpopulations.

#### **TEACHERS**

Teachers must assume the initial responsibility for developing new skills and insights in working with special needs subpopulations. Teachers should

- help students feel at ease within an actual or simulated job placement setting
- explain what is expected of the employee
- be flexible in planning and implementing programs
- help these students achieve success
- provide individualized educational instruction
- counsel with the full participation of the student.

#### **COUNSELORS**

Counselors must assume responsibility for helping the special student accomplish the following objectives

- the ability to communicate one's feelings openly and honestly
- willingness to trust authority figures
- acceptance of responsibility for directing one's own life
- the capacity to cope with fear, ambiguity, and anxiety
- development of information-seeking skills
- improved social adjustment
- vocational maturity

The counselor must continually direct the student to clarify interests, values, and desires by relating past and present experiences to possible job alternatives.

#### **ADMINISTRATORS**

Administrators must ensure that

- adequate linkages with referral sources outside the school exist for placement purposes
- appropriate and varied experiences in the community are provided for special needs subpopulations
- interdisciplinary and individualized curricula are implemented on an openentry/open-exit basis
- home visits and work site visits involving school personnel, family, and employer are part of the job placement and follow-through program
- evaluation programs provide needed feedback
- an advisory committee is established if a need is indicated
- students receive on-the-job training assistance.

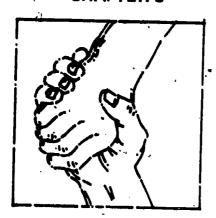
#### PARENTS/VOLUNTEERS/ PARAPROFESSIONALS

Members of this group can greatly enhance employment opportunities for special students by

- helping them to improve their social skills.
- providing on-site observation of various jobs
- preparing them for employer expectations
- familiarizing potential employers with their abilities
- introducing them to potential employers
- providing support and encouragement when frustration or performance failure on the job threatens their employment



#### **CHAPTER 3**



# UNIQUE EDUCATIONAL NEEDS OF SPECIAL GROUPS:

WAYS TO MEET THEM

Unique educational needs must be recognized to serve a specific special group adequately. Failure to meet these needs may result in an unsuccessful educational experience for the special learner. The following is a list of the unique needs of each special group, and suggested strategies for meeting them.



#### **AMERICAN INDIAN**

#### NEED

To provide culturally-oriented vocational curricula consistent with Indian culture and values ...

To increase the participation and involvement of parents and members of the Indian community in the planning and development of Indian vocational education programs

To provide career guidance and adult education programs which focus on assisting urban Indians to secure employment and to adjust to urban life

To increase reservation-based vocational programs for Native Americans tailored to local tribal economic development plans

To provide adequately trained vocational education instructional personnel who can communicate and relate to the specific needs of Native Americans

To increase transportation services and/or residential facilities to enable Indian students to participate in off-reservation vocational education programs and activities

#### STRATEGY

Include Indian culture in the vocational curriculum

Initiate efforts to involve Indian parents and community leaders in Tribal Education Committees, school boards, advisory committees, and other groups

Establish programs to provide career awareness and career development and employment opportunities for urban adult Indians

Provide resources for equipping and establishing mobile vocational training units and facilities

Recruit and select bilingual-bicultural staff and teacher aides to assist in vocational instructional programs; employ Native Americans from the local tribal community to assist in the teaching-learning process

Provide adequate transportation systems and alternatives (e.g., auxiliary sites) to meet the specific needs of Indian students

#### LIMITED ENGLISH PROFICIENCY

#### **NEED**

To individualize vocational education programs, activities, and learning experiences related to the needs and experiences of limited-English and non-English speaking students

To provide adequately trained and experienced bilingual-bicultural vocational instructional personnel to meet the specific needs of linguistically different students

To design innovative curriculum materials, methods, and strategies for enhancing the success of limited/non-English speaking students in academic and vocational education programs

#### STRATEGY

Provide individualized, performance-based vocational curricula for limited/non-English speaking students

Recruit and select competent bilingualbicultural vocational staff and teacher aides capable of teaching and working with limited/ non-English speaking students

Provide bilingual-bicultural vocational education and training tailored to the specific needs of limited/non-English speaking students



#### INMATES OF CORRECTIONAL INSTITUTIONS

#### NEED

To provide greater flexibility in the scheduling of vocational programs within correctional institutions to increase enrollment

To provide community-oriented, on-the-job vocational training and experiences for increasing the occupational success and career potential of students within correctional institutions

To increase the social interaction and coping skills of special needs students within correctional institutions

Increase efforts to acquire equipment and facilities that correspond to the needs of employers and industry in the vocational community and the local labor market

#### STRATEGY

Increase efforts on the part of vocational instructors and administrators to promote the importance and priority of vocational education programs within correctional institutions

Increase efforts to promote the establishment of policies providing for work release vocational programs

Incorporate social skills and learning experiences into regular vocational education programs

Provide practical, meaningful, and relevant vocational training and experiences for increasing the transferable skills and employment potential of special needs students within correctional settings

#### **MINORITY GROUPS**

#### **NEED**

To increase experiences and activities that enable minorities in academic/vocational education programs to explore their personal and cultural heritage

To increase understanding by minority students of their particular value systems and their relationship to the value systems of others

To increase awareness of various communication patterns among minority students

#### STRATEGY

Provide information, experiences, and multicultural activities to enable minority students to investigate their ethnic heritage

Promote efforts and activities to develop understanding of, and respect for, cultural diversity and different value systems among administrators, instructors, counselors, and students

Provide interdisciplinary approaches to language arts and communications skill development in academic/vocational education programs and activities



#### GIFTED/TALENTED

#### **NEED**

To offer challenging, innovative curricular and extracurricular approaches, methods, and techniques to encourage participation of students in leadership and academic/vocational programs and activities

To increase interaction to stimulate and enhance the performance of gifted and talented students

#### STRATEGY

Use a variety of instructional approaches including programmed instruction, independent projects, and team teaching

\* Provide flexible groupings, non-graded classes, special interest activities, and classes for gifted and talented students in academic and vocational education programs

#### **HANDICAPPED**

#### NEED

To provide access for physically disabled students to facilities, buildings, and equipment in regular vocational education programs

To modify shop and classroom instructional environments to facilitate independent movement of the visually impaired

To develop the social skills of mentally retarded students with respect to peers, teachers, employers, and parents

To improve the physical coordination of learning disabled students to enable them to succeed in vocational/academic educational programs

To improve communication patterns and abilities of speech impaired students

To increase the manual communication skills of all students and teachers in classes with hearing impaired students

To develop coping skills of emotionally disturbed students

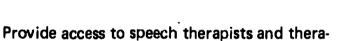
#### STRATEGY

Eliminate and remove architectural barriers which impede access to physical facilities

Provide mobility training for vocational instructors to assist visually impaired students to move freely in classrooms and shop areas

Use innovative instructional methods and techniques including group counseling, role-playing and role-modeling

Provide exercises which will improve the coordination of hands, eyes, and mind



Teach non-verbal modes of communication

Provide counseling, and therepeutic training/ services



peutic services

#### **MIGRANTS**

#### **NEED**

To provide continuity of academic and vocational instruction across all ages and grade levels

To improve attitudes and interactions of teachers and migrant students

To develop vocational curricula to enable migrant students to become contributing and productive members of the community

To provide basic educational skills

To increase the involvement and participation of migrant parents and community members in the vocational education system

#### STRATEGY

Provide continuity through program coordination from one educational setting to another

Provide effective and ongoing teacher-student and teacher-parent contact

Provide innovative bilingual-bicultural curriculum materials to enhance educational experiences for the migrant student

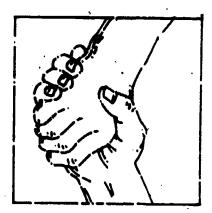
Evaluate basic skills and design and individualize program

Involve migrant parents in the educational process



31

#### **CHAPTER 4**



#### CONCLUSION

In the preceding chapters, we have looked at educational needs common to all special needs populations as well as needs that are unique to specific groups. We have also explored basic strategies that may help us begin to answer those needs.

There are two critical issues that must be addressed in analyzing any need and applying any strategy in response to that need—access and performance. For the special learner, access to and successful performance in vocational programs are complicated by physical, psychological, educational, and economic barriers. Educators must be sensitive to the unique and very real differences of the special learner. In many instances, there is no access to vocational programs. Marry special needs learners are systematically denied access to various vocational programs because of inadequate assessment, occupational stereotyping, inadequate counseling, lack of information about available vocational training, and physical and attitudinal barriers. For example, many gifted and talented students are directed to academically-oriented rather than vocational programs. Some physically handicapped students are unable to participate in vocational education programs because of architectural barriers. Other handicapped students who have sensory impairments or mental disabilities need special materials and teaching techniques not available in many vocational education programs. Many minority students are being directed to specific areas of vocational training and excluded from others.

#### Access

Here are some steps we can take to improve access to vocational programs

- actively promote vocational programs and opportunities and encourage special students to participate
- provide coreer awareness and exploration activities as well as occupational information throughout the school program
- use assessment methods to measure interests and abilities that are culturally, intellectually, physically, and linguistically relevant
- be realistic. Don't overestimate or underestimate the potential of the special learner
- create an open and accepting atmosphere that is free of barriers—physical, attitudinal, and all others



33

#### Performance

The students' performance is affected by many factors

- teacher effectiveness, enthusiasm, and commitment
- instructional program effectiveness
- relevancy of the program and instructional approach to the needs of the individual student

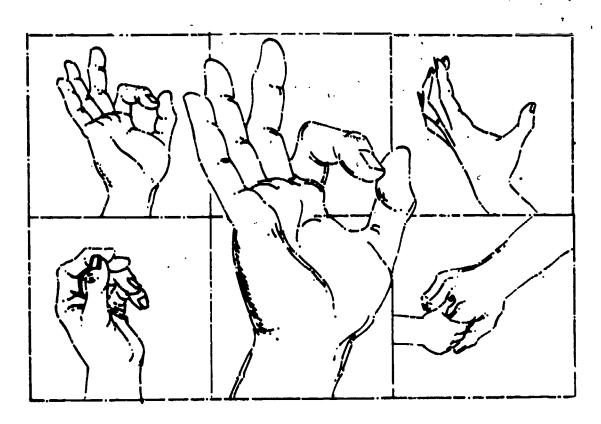
Successful performance by special learners requires sensitivity to their unique needs.

Here are some things we can do to improve performance

- include instructional staff with bilingual, bicultural, experiential, or other qualifications with which special students can identify
- adapt curriculum materials to the specific needs of the special group
- create individualized educational programs (IEPs, IWPs, IUPs) that include the teacher, counselor, parent, student, and other service providers
- provide cooperative work experience opportunities in business and industry; involve community members as role models
- ensure that adequate support services are available to meet the physical and social needs of the special learner

Finally, vocational teachers, counselors, and administrators can increase their ability to respond to the vocational education needs of the special learner through professional development activities. Preservice and inservice training should focus on creating a positive attitude toward the special learner and should ensure that staff are competent to provide a meaningful and rewarding educational experience for the special needs learner.

It isn't easy being special, and it isn't easy to meet the needs of special people. Special people require "special" treatment. It takes a whole team working together with commitment, understanding, enthusiasm and love to make a difference.





#### **BIBLIOGRAPHY**

- Berger, Allen. The Education of the Indians: A Tragedy and a Disgrace. *Elements*, Vol. 4, No. 6, February, 1973.
- Bottoms, James E. and Scott, Paul. "Supportive-Services for Special Student Groups." Vocational Education for Special Groups. Sixth Yearbook. Washington, D.C.: American Vocational Association, 1976.
- Federal Register. Rules and Regulations. Appendix A, Vol. 42, No. 191, October 3, 1977.
- Glaser, Daniel J. The Effectiveness of a Prison and Parole System. Indianapolis, Indiana: Bobhs-Merrill, 1964.
- Henderson, Vivian W. The Economic Status of Negroes in the Nation and in the State, Toward Regional Realism. U.S. Educational Resources Information Center, 1966.
- Marland, Sydney P. Education of the Gifted and Talented. Report to the Congress of the United States by the U.S. Commissioner of Education, 1972.
- Phillips, Charles V. "Diversity of Special Groups: Description and Needs." Vocational Education for Special Groups. Sixth Yearbook. Washington, D.C.: American Vocational Association, 1976.
- Public Law 94-482, Vocational Education Amendments. 90 Stat. 2213, October 12, 1976.
- Tapman, Muriel Shay. Two Million Without Skills. Washington, D.C.: U.S. Office of Education, DHEW, Bureau of Educational Personnel Development, February, 1972.
- U.S. General Accounting Office. Training Educators for the Handicapped; A Need to Redirect Federal Programs, 1976.
- Wall, James E. "Vocational Education for Special Groups: Retrospectively, Introspectively, Prospectively." Vocational Education for Special Groups. Sixth Yearbook. Washington, D.C.: American Vocational Association, 1976.
- Wilms, W. The Effectiveness of Public and Proprietary Occupational Training. Berkeley, California: Center for Research and Development in Higher Education, University of California, 1974.



35